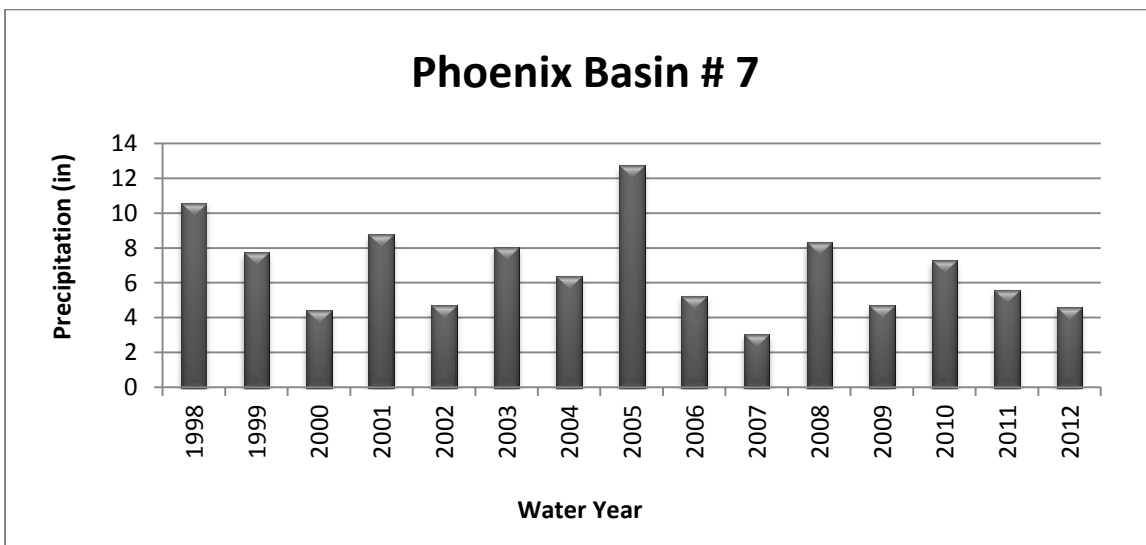


**Station Name: Phoenix Basin #7**  
(formerly Thunderbird @ 7th St.)

<b>Station ID Number History:</b>	<b>4850</b> since 10/17/96
<b>Data Begins:</b>	10/17/1996
<b>Years of Record:</b>	15.96 (as of 10/01/12)
<b>Data Repeater:</b>	Towers Mountain
<b>TRS:</b>	T3N-R3E-Section 16
<b>Latitude:</b>	33° 36' 04.7" (33.6013)
<b>Longitude:</b>	112° 04' 21.4" (112.0726)
<b>Elevation:</b>	1,415 ft. msl
<b>Location:</b>	1/4 mi. SW of Thunderbird Rd. and 7th Street
<b>Data Record:</b>	
Partial Months (>10 days missing):	None
Missing Months:	None
<b>Remarks:</b>	Records Good



**Data Statistics for Period of Record:**

Number of storms greater than 1 inch in 24 hours:	19	
Number of storms greater than 2 inches in 24 hours:	2	
Number of storms greater than 3 inches in 24 hours:	0	
		Approx. $T_r$
Greatest 15 minute total:	1.14" on 07/14/02	50 years
Greatest 1 hour total:	1.97" on 07/14/02	61 years
Greatest 3 hour total:	2.01" on 07/14/02	31 years
Greatest 6 hour total:	2.01" on 07/14/02	18 years
Greatest 24 hour total:	2.64" on 02/13/03	19 years
Greatest 72 hour total:	2.84" on 02/13/03	12 years

**Water Year Totals: (Mean of Complete Water Years [15] = 6.80 inches)**

Water Year	Total	Water Year	Total	Water Year	Total
2010		2010	7.28	2000	4.41
2009		2009	4.69	1999	7.76
2008		2008	8.35	1998	10.59
2007		2007	3.03	1997	M
2006		2006	5.24	1996	
2005		2005	12.72	1995	
2004		2004	6.34	1994	
2003		2003	8.03	1993	
2002	4.57	2002	4.69	1992	
2001	5.59	2001	8.78	1991	

M: One or more months contain partial or missing data

**Design Rainfall for this Geographic Location:**

**Click this [link](#) for Point Precipitation Frequency Estimates (Annual Maximum Series) in Tabular and Graphical Formats from NOAA Atlas 14, Volume I, Version 5**

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin #7 (gage # 4850) for Water Year 2012**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1													
2													
3													
4	.08	.24								.04			
5		.24											
6													
7		.12										.71	
8													
9								.04				.08	
10												.12	
11												.12	
12			.35									.04	
13		.16	.28							.04			
14			.08										
15													
16													
17													
18			.04			.31							
19													
20			.12										
21											.55		
22											.12		
23											.35		
24													
25	.08												
26							.08						
27													
28										.12			
29										.08			
30					----								
31		----			----		----		----			----	
SUM	0.16	0.75	0.87	0.00	0.00	0.31	0.08	0.04	0.00	0.28	1.02	1.06	
ACC	0.16	0.91	1.77	1.77	1.77	2.09	2.17	2.20	2.20	2.48	3.50	4.57	
MAX	0.08	0.24	0.35	0.00	0.00	0.31	0.08	0.04	0.00	0.12	0.55	0.71	
NO.	2	4	5	0	0	1	1	1	0	4	3	5	
Maximum Daily Rainfall													0.71
Maximum Monthly Rainfall													1.06
Total Annual Rainfall													4.57
Number of Days with Rain													26

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin #7 (gage # 4850) for Water Year 2011**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3											.28	
4	.12									----		
5	.87											
6												
7												
8												
9							.24					
10												
11										.08		
12												
13											.28	
14												
15												
16			.16									
17												
18												
19					.35						.08	
20	.04				.16							
21	.28	.04				.12						
22			.24									
23			.16									
24										.08		
25												
26					.08							
27					.31							
28												
29			.67		----			----				
30			.35		----					.04		
31		----			----		----		----	.59		----
SUM	1.30	0.04	1.57	0.00	0.91	0.12	0.24	0.00	0.00	0.79	0.63	0.00
ACC	1.30	1.34	2.91	2.91	3.82	3.94	4.17	4.17	4.17	4.96	5.59	5.59
MAX	0.87	0.04	0.67	0.00	0.35	0.12	0.24	0.00	0.00	0.59	0.28	0.00
NO.	4	1	5	0	4	1	1	0	0	4	3	0
Maximum Daily Rainfall												0.87
Maximum Monthly Rainfall												1.57
Total Annual Rainfall												5.59
Number of Days with Rain												23

Annual Total (mm): 142

Days Down: 4.25

Gage 4850 down from 05/28 03:37 (106) through 05/30 03:37 (106) due to data collision; no rain fell.

Gage 4850 down from 07/03 05:59 (106) through 07/05 11:59 (106) due to data collision; no rain fell.

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin #7 (gage # 4850) for Water Year 2010**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1													
2													
3					.12								
4													
5													
6													
7	.04		.71		.16	.59					.55		
8						.12							
9						.04							
10			----										
11			----										
12													
13													
14													
15													
16													
17											.12		
18				.07									
19				.83									
20					.20								
21				1.10	.39								
22			.12	.08	.12						.08	.08	
23				.08		.12							
24													
25													
26													
27					.04								
28					.71						.20		
29					----					.28			
30					----								
31		----			----		----		----	.35		----	
SUM	0.04	0.00	0.83	2.16	1.73	0.87	0.00	0.00	0.00	0.63	0.94	0.08	
ACC	0.04	0.04	0.87	3.03	4.76	5.63	5.63	5.63	5.63	6.26	7.20	7.28	
MAX	0.04	0.00	0.71	1.10	0.71	0.59	0.00	0.00	0.00	0.35	0.55	0.08	
NO.	1	0	2	5	7	4	0	0	0	2	4	1	
Maximum Daily Rainfall													1.10
Maximum Monthly Rainfall													2.16
Total Annual Rainfall													7.28
Number of Days with Rain													26

**Notes:**

Annual rainfall in millimeters: 185

Gage 4850 down from 12/09 16:22 (19) through 12/12 16:23 (19); failure not documented, no rain fell.

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin # 7 (gage # 4850) for Water Year 2009**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												.08
2												
3												
4				.24								
5												.59
6												
7												
8					.24							
9		.04			.51							
10												
11							.39					
12												
13											.31	
14												
15			.04									
16			.79									
17			.12		.04							
18			.12									
19												
20										.04		
21								.08			.04	
22			.12	.12				.12				
23			.12									
24												
25			.12									
26		.12	.16									
27		.16										
28												
29					----							
30					----							
31		----			----		----		----			----
SUM	0.00	0.31	1.57	0.35	0.79	0.00	0.39	0.20	0.00	0.04	0.35	0.67
ACC	0.00	0.31	1.89	2.24	3.03	3.03	3.43	3.62	3.62	3.66	4.02	4.69
MAX	0.00	0.16	0.79	0.24	0.51	0.00	0.39	0.12	0.00	0.04	0.31	0.59
NO.	0	3	8	2	3	0	1	2	0	1	2	2
Maximum Daily Rainfall												0.79
Maximum Monthly Rainfall												1.57
Total Annual Rainfall												4.69
Number of Days with Rain												24

**Notes:**

Annual rainfall in millimeters: 119

Total down-time: 0.00 days





**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin # 7 (gage # 4850) for Water Year 2006**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												.63
3												.51
4											----	.04
5											----	
6											----	
7			----									.20
8			----									
9			----									
10			----									
11			----			1.50					.04	
12				----							.24	
13				----								
14				----								
15												
16												
17												
18	.51											
19						.35						
20												
21						.04					.12	
22											.08	
23												
24											.39	
25						----				.28		
26						----				.24		
27												
28												
29					----							
30					----					.04		
31		----			----		----		----			----
SUM	0.51	0.00	0.00	0.00	0.00	1.89	0.00	0.00	0.00	0.55	0.87	1.38
ACC	0.51	0.51	0.51	0.51	0.51	2.40	2.40	2.40	2.40	2.95	3.82	5.24
MAX	0.51	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.28	0.39	0.63
NO.	1	0	0	0	0	3	0	0	0	3	5	4
Maximum Daily Rainfall												1.50
Maximum Monthly Rainfall												1.89
Total Annual Rainfall												5.24
Number of Days with Rain												16

**Notes:**

Annual rainfall in millimeters: 133 Total down-time: 15.49 days  
 Gage 4850 down from 12/06 09:13 (13) through 12/12 11:29 (13) due to transmitter failure; no rain fell.  
 Gage 4850 down from 01/11 22:39 (13) through 01/15 07:39 (13) due to programming error; no rain fell.  
 Gage 4850 down from 03/24 22:39 (61) through 03/27 11:39 (61) for unknown reason; no rain fell.  
 Gage 4850 down from 08/03 19:49 (75) through 08/07 07:25 (75) due to programming error; no rain fell.

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin # 7 (gage # 4850) for Water Year 2005**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2											.98	
3				.75							.20	1.10
4			.24	.39		.08						
5			.24			.12					.04	
6			.28			.04						
7		.31									.08	
8		.12									.08	
9											.04	
10				.04	.12							
11				.16	.87							
12		.04			.35							
13												
14												
15					.04							
16												
17					.24							
18					.20							
19					.83							
20					.24							
21	.39	.04			.20							
22		.43			.04							
23					.04		.39		.04	.04	.16	
24				.12	.12	.04	.04					
25						.08						
26				.47								
27												
28	.47		.12									
29			.91	.24	-----							
30					-----					.04		
31		-----			-----		-----		-----	.12		-----
SUM	0.87	0.94	1.77	2.17	3.27	0.35	0.43	0.00	0.04	0.20	1.57	1.10
ACC	0.87	1.81	3.58	5.75	9.02	9.37	9.80	9.80	9.84	10.04	11.61	12.72
MAX	0.47	0.43	0.91	0.75	0.87	0.12	0.39	0.00	0.04	0.12	0.98	1.10
NO.	2	5	5	7	12	5	2	0	1	3	7	1
Maximum Daily Rainfall												1.10
Maximum Monthly Rainfall												3.27
Total Annual Rainfall												12.72
Number of Days with Rain												50

**Notes:**

Annual rainfall in millimeters: 323

Total down-time: 0.00 days



**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin # 7 (gage # 4850) for Water Year 2003**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1						.04					.04	
2												
3												
4												
5												
6												
7												.04
8				.31								
9				.04								
10												
11												
12					.08							
13					2.24						.12	
14					.51						.28	
15							.16				.08	
16						.35						
17	.04		.08			.67						
18												
19											.31	
20			.04	.04	-----							
21					-----							
22												
23	.12		.12									
24												
25					.59							
26	.39				.08							
27					.20							
28												
29		.35			-----					.63		
30		.08			-----							
31		-----			-----		-----		-----			-----
SUM	0.55	0.43	0.24	0.39	3.70	1.06	0.16	0.00	0.00	0.63	0.83	0.04
ACC	0.55	0.98	1.22	1.61	5.31	6.38	6.54	6.54	6.54	7.17	7.99	8.03
MAX	0.39	0.35	0.12	0.31	2.24	0.67	0.16	0.00	0.00	0.63	0.31	0.04
NO.	3	2	3	3	6	3	1	0	0	1	5	1
							Maximum Daily Rainfall					2.24
							Maximum Monthly Rainfall					3.70
							Total Annual Rainfall					8.03
							Number of Days with Rain					28

**Notes:**

Total annual rainfall in millimeters: 204  
 Gage 4850 down from 2/19 18:25 (113) through 2/22 12:25 (113) due to programming error, no rain fell.

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Phoenix Basin #7 (gage # 4850) for Water Year 2002**

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3												
4			.55									
5		.08										
6												.71
7							.12					.08
8												.04
9												
10												.04
11			.16									
12			.08									
13												
14										2.01		
15										.04		
16												
17												
18												
19												
20												
21												
22												
23										.75		
24										.04		
25												
26												
27												
28												
29					-----							
30					-----							
31		-----			-----		-----		-----			-----
SUM	0.00	0.08	0.79	0.00	0.00	0.00	0.12	0.00	0.00	2.83	0.00	0.87
ACC	0.00	0.08	0.87	0.87	0.87	0.87	0.98	0.98	0.98	3.82	3.82	4.69
MAX	0.00	0.08	0.55	0.00	0.00	0.00	0.12	0.00	0.00	2.01	0.00	0.71
NO.	0	1	3	0	0	0	1	0	0	4	0	4
							Maximum Daily Rainfall					2.01
							Maximum Monthly Rainfall					2.83
							Total Annual Rainfall					4.69
							Number of Days with Rain					13

**Notes:**

Total annual rainfall in millimeters: 119

Total down-time: 0.00 days

**Flood Control District of Maricopa County ALERT System**  
Daily Rainfall at Thunderbird @ 7th St. (gage # 4850) for Water Year 2001

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3												
4		.04										
5							.28					
6		.12					.16			.04		
7						.63						
8	.08			.31								
9	.04			.12							.31	
10	.79						.04					
11												
12				.71								
13					.20							
14					.24						.04	
15												
16				.04								
17											.20	
18	.04											
19	.04											
20												
21	.24						.20					
22	.51											
23	.16											
24	.12											
25					.04							
26					.12							
27	.59			1.10	.12							
28	.08				.20							
29					----					.20		
30	.35				----					.24		
31	.04	----			----		----		----			----
SUM	3.07	0.16	0.00	2.28	0.91	0.63	0.67	0.00	0.00	0.47	0.55	0.00
ACC	3.07	3.23	3.23	5.51	6.42	7.05	7.72	7.72	7.72	8.23	8.78	8.78
MAX	0.79	0.12	0.00	1.10	0.24	0.63	0.28	0.00	0.00	0.24	0.31	0.00
NO.	13	2	0	5	6	1	4	0	0	3	3	0
Maximum Daily Rainfall												1.10
Maximum Monthly Rainfall												3.07
Total Annual Rainfall												8.78
Number of Days with Rain												37

**Notes:**

Annual rainfall in millimeters: 223

Total down-time: 0.00 days

# Flood Control District of Maricopa County ALERT System

Daily Rainfall at Thunderbird @ 7th St. (gage # 4850) for Water Year 2000

DAY	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1												
2												
3												
4			----									
5			----			.75					.04	
6						1.22						
7						.20					.51	
8											.55	
9												
10												
11												
12												
13												
14												
15												
16												
17											.35	
18												
19												
20												
21					.16							
22												
23									.31			
24												
25												
26												
27												
28						.08						
29											.24	
30					----							
31		----			----		----		----			----
SUM	0.00	0.00	0.00	0.00	0.16	2.24	0.00	0.00	0.31	0.00	1.69	0.00
ACC	0.00	0.00	0.00	0.00	0.16	2.40	2.40	2.40	2.72	2.72	4.41	4.41
MAX	0.00	0.00	0.00	0.00	0.16	1.22	0.00	0.00	0.31	0.00	0.55	0.00
NO.	0	0	0	0	1	4	0	0	1	0	5	0
Maximum Daily Rainfall												1.22
Maximum Monthly Rainfall												2.24
Total Annual Rainfall												4.41
Number of Days with Rain												11

**Notes:**

Annual rainfall in millimeters: 112 Total down-time: 2.50 days  
Gage 4850 down from 12/03 21:02 (0) through 12/06 08:59 (0) due to transmitter failure; no rain fell.

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Thunderbird @ 7th St. (gage # 4850) for Water Year 1999**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.12	----				
2			.28				.63	----				
3												
4					.24		.08					
5					.12						.28	
6			.20							.24		
7			.04							.31		
8												
9												
10											.16	
11			----									.04
12			----									
13							.08					
14										.91		.04
15			.20							.31		
16						.08						
17												
18												
19												.94
20												
21												
22										.04		.04
23										.24		
24												
25	.35											
26	.08											
27											1.18	
28		.20										
29					----							
30	.35				----		----					
31		----			----		----		----			----
SUM	0.79	0.20	0.71	0.00	0.35	0.08	0.91	0.00	0.00	2.05	1.61	1.06
ACC	0.79	0.98	1.69	1.69	2.05	2.13	3.03	3.03	3.03	5.08	6.69	7.76
MAX	0.35	0.20	0.28	0.00	0.24	0.08	0.63	0.00	0.00	0.91	1.18	0.94
NO.	3	1	4	0	2	1	4	0	0	6	3	4
							Maximum Daily Rainfall					1.18
							Maximum Monthly Rainfall					2.05
							Total Annual Rainfall					7.76
							Number of Days with Rain					28

**Flood Control District of Maricopa County ALERT System**  
**Daily Rainfall at Thunderbird @ 7th St. (gage # 4850) for Water Year 1998**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			.04				.16					
2												
3					.04							.04
4					1.38							.04
5										.04	.04	
6			.12	----						.87	.04	.04
7			.35	----	.04					.12		
8			.16		.59						----	
9					.08						----	
10				.28							----	
11												.04
12							.08					
13												
14		.08			.08	.08		.04				
15					.67	.12					.91	
16												
17					.63	.04				.39		
18					.04					.04		
19			.04									
20					.12							
21			.28		.04							
22			.51									.08
23												
24			.04		.59							
25												
26						.83						
27												
28						.24						
29					----	.16						
30					----							
31		----			----		----		----			----
SUM	0.00	0.08	1.54	0.28	4.29	1.46	0.24	0.04	0.00	1.46	0.98	0.24
ACC	0.00	0.08	1.61	1.89	6.18	7.64	7.87	7.91	7.91	9.37	10.35	10.59
MAX	0.00	0.08	0.51	0.28	1.38	0.83	0.16	0.04	0.00	0.87	0.91	0.08
NO.	0	1	8	1	12	6	2	1	0	5	3	5
Maximum Daily Rainfall												1.38
Maximum Monthly Rainfall												4.29
Total Annual Rainfall												10.59
Number of Days with Rain												44

**Notes:**

Annual rainfall in millimeters: 269 Total down-time: 6.0 days  
 Gage down from 1/05 20:55 (41) through 1/08 9:29 (41) due to battery failure; no rain fell.  
 Gage down from 8/07 20:54 (240) through 8/11 9:10 (240) due to transmitter failure; no rain fell.

**Flood Control District of Maricopa County ALERT System**  
Daily Rainfall at Thunderbird @ 7th St. (gage # 4850) for Water Year 1997

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												
2							.08					
3				.04			.24				.24	
4												
5												.04
6												.04
7												
8											.24	
9												
10												
11												.79
12												
13				.51								
14				.04								
15												
16												
17												
18												
19												
20												
21												
22		.08										
23												
24												
25												.04
26				.04								
27					.63							
28					.08							
29												
30										.04	.20	
31												
SUM	0.00	0.08	0.00	0.63	0.71	0.00	0.31	0.00	0.00	0.04	0.67	0.91
ACC	0.00	0.08	0.08	0.71	1.42	1.42	1.73	1.73	1.73	1.77	2.44	3.35
MAX	0.00	0.08	0.00	0.51	0.63	0.00	0.24	0.00	0.00	0.04	0.24	0.79
NO.	0	1	0	4	2	0	2	0	0	1	3	4
							Maximum Daily Rainfall					0.79
							Maximum Monthly Rainfall					0.91
							<b>Partial</b> Annual Rainfall					3.35
							Number of Days with Rain					17

**Notes:**

Partial annual rainfall in millimeters: 85

Total down-time: 2.6 days

Gage installed on 10/17/96.

Gage down from 1/18/97 22:15 (17) through 1/21/97 13:08 (17) for unknown reason; no rain fell.